No. 200300206

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Florida Agricultural Experiment Station

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR PORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE VE PURPOSE , OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE SE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT D BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) E SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUM GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.

PEANUT

'DP-1'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twenty-fifth day of August, in the year two thousand and five.*

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. *Include form number and date on all reproductions.* FORM APPROVED - OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) *(as it is to appear on the Certificate)*
Florida Agricultural Experiment Station

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER
UF97318

3. VARIETY NAME
DP-1

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
Office of Dean for Research
1022 McCarty Hall, University of Florida
P. O. Box 110200
Gainesville, FL 32611-0200

5. TELEPHONE *(include area code)*
352-392-1784

6. FAX *(include area code)*
352-392-4965

FOR OFFICIAL USE ONLY

PVPO NUMBER
200500206

FILING DATE
March 31, 03

7. GENUS AND SPECIES NAME
Arachis hypogaea L.

8. FAMILY NAME *(Botanical)*
Leguminoeae

9. CROP KIND NAME *(Common name)*
Peanut (Groundnut)

FEES RECEIVED

FILING AND EXAMINATION FEE:
$ 3,652 00
DATE
March 31, 03

CERTIFICATION FEE:
$ 682 00
DATE July 22, 2005

10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)* *(Common name)*
Florida Agricultural Experiment Station

11. IF INCORPORATED, GIVE STATE OF INCORPORATION
NA

12. DATE OF INCORPORATION
NA

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS
Dr. D. W. Gorbet
North Florida Research and Education Center
3925 Highway 71
Marianna, FL 32446

14. TELEPHONE *(include area code)*

16. FAX *(include area code)*

16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED *(Follow instructions on reverse)*

a. ☒ Exhibit A. Origin and Breeding History of the Variety
b. ☒ Exhibit B. Statement of Distinctness
c. ☒ Exhibit C. Objective Description of the Variety
d. ☒ Exhibit D. Additional Description of the Variety *(Optional)*
e. ☒ Exhibit E. Statement of the Basis of the Applicant's Ownership
f. ☒ Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in an approved public repository)*
g. ☒ Filing and Examination Fee ($2,460), made payable to "Treasurer of the United States" *(Mail to PVPO)*

17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act)*
☒ YES *(If "yes," answer items 18 and 19 below)* ☐ NO *(If "no," go to item 20)*

18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☒ YES ☐ NO

19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☒ FOUNDATION ☒ REGISTERED ☒ CERTIFIED

20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?
☒ YES *(If "yes," give names of countries and dates)* ☐ NO
USA, May 2002

21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT *(Owner(s))*		SIGNATURE OF APPLICANT *(Owner(s))*	
D. W. Gorbet			
NAME *(Please print or type)*		NAME *(Please print or type)*	
D. W. Gorbet		Richard L. Jones	
CAPACITY OR TITLE	DATE	CAPACITY OR TITLE	DATE
Professor/Breeder	3/10/03	Dean for Research	

STD-470 (03-96) *(Previous editions are to be destroyed)* *(See reverse for instructions and information collection burden statement)*

REPRODUCE LOCALLY. *Include form number and date on all reproductions*

Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

RHO 4/18/03

1. NAME OF OWNER
Florida Agricultural Experiment Station
~~University of Florida, IFAS~~

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME
UF97318

3. VARIETY NAME
DP-1

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
Office of Dean for Research
1022 McCarty Hall, University of Florida
P. O. Box 110200
Gainesville, FL 32611-0200

5. TELEPHONE *(include area code)*
352-392-1784

6. FAX *(include area code)*
352-392-4965

FOR OFFICIAL USE ONLY

PVPO NUMBER

FILING DATE

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*
University Ag. Expt. Stn. (Public)

8. IF INCORPORATED, GIVE STATE OF INCORPORATION
NA

9. DATE OF INCORPORATION
NA

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*
Dr. Daniel W. Gorbet
North Florida Research and Education Center
3925 Highway 71
Marianna, FL 32446

FEES RECEIVED
FILING AND EXAMINATION FEES: $
DATE
CERTIFICATION FEE: $
DATE

11. TELEPHONE *(Include area code)*
850-482-9956

12. FAX *(Include area code)*
850-482-9917

13. E-MAIL
dgorbet@mail.ifas.ufl.edu

14. CROP KIND *(Common Name)*
Peanut

15. GENUS AND SPECIES NAME OF CROP
Arachis hypogaea L.

16. FAMILY NAME *(Botanical)*
Leguminoseae

17. IS THE VARIETY A FIRST GENERATION HYBRID?
☐ YES ☒ NO

18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)
- a. ☒ Exhibit A. Origin and Breeding History of the Variety
- b. ☒ Exhibit B. Statement of Distinctness
- c. ☒ Exhibit C. Objective Description of Variety
- d. ☒ Exhibit D. Additional Description of the Variety *(Optional)*
- e. ☒ Exhibit E. Statement of the Basis of the Owner's Ownership
- f. ☒ Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)*
- g. ☒ Filing and Examination Fee ($3,652), made payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)*

19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? *See Section 83(a) of the Plant Variety Protection Act)*
☒ YES *(If "yes", answer items 20 and 21 below)* ☐ NO *(If "no", go to item 22)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? ☒ YES ☐ NO
IF YES, WHICH CLASSES? ☒ FOUNDATION ☒ REGISTERED ☒ CERTIFIED

21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☒ YES ☐ NO
IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS.
1 FOUNDATION 1 REGISTERED 1 CERTIFIED
(If additional explanation is necessary, please use the space indicated on the reverse.)

22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?
☒ YES May 2002 ☐ NO
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. *(Please use space indicated on reverse.)*

23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(PLANT BREEDER'S RIGHT OR PATENT)*?
☐ YES ☒ NO
IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. *(Please use space indicated on reverse.)*

24. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER
Daniel W. Gorbet

NAME *(Please print or type)*
Daniel W. Gorbet

CAPACITY OR TITLE
Professor/Breeder

DATE
April 11, 2003

SIGNATURE OF OWNER

NAME *(Please print or type)*
Richard L. Jones

CAPACITY OR TITLE
Dean for Research

DATE
4/23/03

2

ST-470 (02-10-2003) designed by the Plant Variety Protection Office using Word 2000. Replaces former versions of ST-470, which are obsolete.

(See reverse for instructions and information collection burden statement)

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable *(in the sense that it will reproduce an entire plant)* tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for $3,652 ($432 filing fee and $3,220 examination fee), payable to "Treasurer of the United States" *(See Section 97.6 of the Regulations and Rules of Practice.)* Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of $432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office
Telephone: (301) 504-5518
FAX: (301) 504-5291
Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

ITEM

18a. Give:
(1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified

18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:

(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.

18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, *etc.*

18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.

19. If "Yes" is specified *(seed of this variety be sold by variety name only, as a class of certified seed)*, the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. *(See Regulations and Rules of Practice, Section 97.103).*

22. *See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.*

23. *See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.*

21. CONTINUED FROM FRONT *(Please provide a statement as to the limitation and sequence of generations that may be certified.)*

As noted (Breeder, Foundation, Registered, Certified (one year each)

22. CONTINUED FROM FRONT *(Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)*

May 2002 (Foundation)

23. CONTINUED FROM FRONT *(Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)*

NA

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. *(See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)*

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center–East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed.htm

ST-470 (02-10-2003) designed by the Plant Variety Protection Office with Word 2000. Replaces former versions of ST-470, which are obsolete.

'DP-1' - PVP - Peanut Application # 200300206

16a. Exhibit A - Origin and Breeding History of Variety

DP-1 (UF97318) came from a cross of Southern Runner and UF81206, made in Marianna in 1986. Both of the parents have PI203396 as a parent. The cross was made to provide a population to select for good pod yields, improved grades, stronger disease resistance (leafspot, white mold, tomato spotted wilt virus) and some root knot nematode resistance/tolerance. A pedigree selection program was followed in the F_1-F_7 under unsprayed (no leafspot control) conditions. The selection each generation that ultimately resulted in DP-1 was a single plant per generation with seed from two F_7 plants being bulked for initial field yield tests. Plot size in F_2-F_6 was about 130 plants in F_2 and about 30 plants per plot in F_3-F_6. Additional plant selections (2-3) were made each generation that were not in the selection sequence that ultimately resulted in DP-1.

Pedigree = UF97318 = 86x43-1-1-1-1-1-b2-B
(Southern Runner x UF81206)

DP-1 was first yield tested at Marianna in unsprayed conditions in 1994 with seed from two F_7 plants. DP-1 was yield tested in Marianna and Gainesville in 1997-2001, mostly in unsprayed tests. DP-1 has been uniform and stable since the initial year of yield testing and subsequent testing and seed increase. Variants have not been detected since initial yield testing began on DP-1

Southern Runner was released by UF Agricultural Experiment Station in 1986 as a late maturity runner-type peanut cultivar with moderate resistance to leafspot and rust. UF81206 is a UF breeding line that has resistance to late leafspot, white mold, tomato spotted wilt virus, rust and some root knot nematode resistance. DP-1 is a runner market-type peanut with seed size and grades intermediate between the parents but grades similar to Southern Runner, with disease resistance similar to UF81206. DP-1 has somewhat less vine growth than Southern Runner and is classified as *Arachis hypogaea* ssp. *hypogaea* var. *hypogaea*. Testa color of the seed is similar to Southern Runner (tan).

References:

1) Gorbet, D. W., A. J. Norden, F. M. Shokes, and D. A. Knauft. 1987. Registration of 'Southern Runner' Peanut. Crop Sci. 27:817.
2) Gorbet, D. W., and F. M. Shokes. 2002. Registration of 'Florida MDR 98' Peanut. Crop Sci. 42:2207-2208.

16.b. Exhibit B – Novelty Statement

DP-1 is a runner growth habit and market-type peanut (*A. hypogaea* L.) with dark green foliage with multiple disease resistance (late leafspot, tomato spotted wilt virus, white mold, and rust). DP-1 is most similar to 'Florida MDR 98' but has somewhat smaller seed size and better resistance to leafspot (Table 1, 1996-2001). Averaged for unsprayed Florida tests, the 100- seed weight for DP-1 was 58± 1g vs. 67± 1g for Florida MDR 98. On the widely used Florida 1-10 scale, DP-1 rated 3.7± 0.1 vs. 4.2± 0.1 for Florida MDR 98. On a 4-1 scale (4 = resistant), DP-1 would rate 3.2 vs 2.8 for Florida MDR 98 in unsprayed leafspot tests. Table 2 (Exhibit D) gives results from leafspot studies at Marianna and Gainesville.

Pods of DP-1 have an inconspicuous beak, while Florida MDR 98 pod beaks are absent. Based on one season (three tests) the foliage of DP-1 is G-137A and Florida MDR 98 is G-137C (Royal Horticultural Society Colour Chart).

16.c. Exhibit C – Objective Description of Variety

DP-1 is a late maturity runner growth habit and market-type peanut variety (150± DAP in Florida). Seed of DP-1 are plump, rounded, with tan testa and shape similar to Florunner. The 100-seed weight for DP-1 is about 62g. Pod yields of DP-1 are similar to that of C-99R in Florida tests but the trend is for C-99R to have somewhat better pod yields in sprayed (leafspot) tests and DP-1 to have somewhat better pod yields with less disease in unsprayed tests.

Data in Table 1 gives relative disease resistance in Florida tests for TSWV and late leafspot. Using the Florida 1-10 scale (1 = no disease), DP-1 rated somewhat more resistant than C-99R. If you convert these to a 1-4 scale (4 = highly resistant), the TSWV ratings would be 3.5 vs 3.3 for C-99R. Looking at the leafspot ratings on the Florida 1-10 scale (1 = no disease), DP-1 rated 3.9 vs. 5.4 for C-99R in unsprayed tests or on a 1-4 scale, the value would be 3.1 vs. 2.5 for C-99R. See Exhibit D for more data.

Data on resistant to root knot nematode (*M. arenaria*) is too limited to make a rating for DP-1 reaction to the pest.

References:

1) Chiteka, Z. A.., D. W. Gorbet, F. M. Shokes, T. A. Kucharek and D. A. Knauft. 1988. Components of resistance to late leafspot in peanut. I. Levels and variability – Implications for selection. Peanut Sci. 21:81-91.
2) Gorbet, D. W. and F. M. Shokes. 2002. Registration of 'C-99R' Peanut. Crop Sci. 42:2207.
3) Gorbet, D. W., D. A. Knauft and F. M. Shokes. 1990. Response of peanut genotypes with different levels of leafspot resistance to fungicide treatment. Crop Sci. 30:529-533.

FORM APPROVED: OMB NO. 40-R3822

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
~~LIVESTOCK, POULTRY, GRAIN & SEED DIVISION~~
BELTSVILLE, MARYLAND 20705

OBJECTIVE DESCRIPTION OF VARIETY
PEANUT (Arachis hypogaea)

NAME OF APPLICANT(S)
Florida Agricultural Experiment Station

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)
Office of Dean for Research
1022 McCarty Hall, University of Florida
P. O. Box 110200, Gainesville, FL 32611-0200

VARIETY NAME OR TEMPORARY DESIGNATION
DP-1

FOR OFFICIAL USE ONLY
PVPO NUMBER
20030206

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. BOTANICAL TYPE:

[1] Flowering on the Main Stem: 1 = ABSENT 2 = PRESENT

[1] Branching Pattern: 1 = ALTERNATE -- Pairs of vegetative & reproductive branches (Virginia) 3 = OTHER (*Specify*) _____
2 = SEQUENTIAL -- Continuous reproductive branches (Valencia--Spanish) _____

2. PLANT:

[1] Habit: 1 = PROSTRATE (*Florunner*) 2 = DECUMBENT (*NC--5*) 3 = SEMI-ERECT (*Florispan*) 4 = ERECT (*Starr*)

[3] Branching: 1 = SPARSE (*Valencia*) 2 = MODERATE (*Starr*) 3 = PROFUSE (*Florunner*)

3. MATURITY:

[2] Region: 1=VIRGINIA, NORTH CAROLINA 2 = S.E. UNITED STATES 3=S.W.UNITED STATES 4=OTHER

[1][5][0] NUMBER OF DAYS TO MATURITY

[ ][ ] NO. OF DAYS EARLIER THAN . . . . . [ ] 1 = STARR 2 = FLORUNNER 3 = FLORIGIANT 4 = VIRGINIA 61R 5 = NC - 2

[1][4] NO. OF DAYS LATER THAN . . . . . [2] 6 = NC - 5 7 = SOUTHEASTERN RUNNER 56-15 8 = OTHER (*Specify*) _____

4. LEAVES:

[3] COLOR AT 60 DAYS:(*Nickerson Color Designation*): 1 = LIGHT GREEN (10Gy 6/9) 2 = MEDIUM GREEN (2.5G 5/9) 3 = DARK GREEN (5G 4/7) 4 = OTHER (*Specify*) _____

[5][7] MM. LEAFLET LENGTH (*Basal leaflet of the youngest fully opened leaf*)

[2].[7] LEAFLET LENGTH/WIDTH RATIO

5. POD: (Average for 20 pods at maturity)

[2][6] MM. LENGTH

[1][3] MM. DIAMETER

[5][2][0][2] KG./HA. POD YIELD

[ ][ ][2] % LESS THAN . . . . . [ ] 1 = STARR 2 = FLORUNNER 3 = FLORIGIANT 4 = VIRGINIA 61R 5 = NC - 2

[ ][ ][ ] % MORE THAN . . . . . [ ] 6 = NC - 5 7 = SOUTHEASTERN RUNNER 56-15 8 = OTHER (*Specify*) C-99R

[ ][2] % FANCY SIZE: (*% riding 13.46 mm., 34/64 inch, spacing set on presizer roller*)

FORM LPGS-470-29 (8-80) (Formerly Form GR-470-29 (6-17-74) which may be used)

5. POD (Average for 20 pods at maturity):

[2] NUMBER OF SEEDS PER POD: 1 = 1 2 = 2 3 = 3 4 = 3–4 5 = 2–3–4

[2] CONSTRICTION: 1 = SHALLOW OR NONE (*Virginia 56R, Argentine*) 2 = MEDIUM (*Virginia 61R*) 3 = DEEP (*Starr*)

[1] SURFACE: 1 = GLABROUS (*Florunner*) 2 = PUBESCENT (*Florispan*)

[2] BEAK: 1 = ABSENT 2 = INCONSPICUOUS 3 = PRONOUNCED

6. SEED (Mature, cured but not aged):

[3] COAT COLOR: 1 = WHITE (*Pearl*) 2 = CREAM 3 = TAN (*Starr*) 4 = BROWN 5 = PINK (*Florigiant*) 6 = RED 7 = PURPLE 8 = DARK PURPLE 9 = VARIGATED 10 = OTHER (*Specify*) _____

[1] COAT SURFACE: 1 = SMOOTH 2 = INDENTED [1] 1 = UNIFORM COLOR 2 = BLEMISHED

[2] SHAPE: 1 = SPHERIODAL (*Starr*) 2 = SHORT-BROAD (*Florunner*) 3 = ELONGATED-SLENDER (*Dixie Runner*) 4 = CYLINDRICAL-TAPERED ENDS 5 = CYLINDRICAL-BLUNT ENDS (*NC–2*) 6 = OTHER (*Specify*) _____

[15] MM. LENGTH [9] MM. WIDTH [62] GRAMS PER 100 SEED (*8% Moisture*)

7. DISEASE RESISTANCE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant) Scale 1-4; 4 = resistant

[2]	SOUTHERN STEM ROT	[2]	RUST
[2]	EARLY LEAF SPOT	[0]	VIRUS X
[2]	SOUTHERN LEAF SPOT	[0]	MOSAIC
[0]	POD ROT COMPLEX	[2]	OTHER (*Specify*) Tomato Spotted Wilt Virus

RAD 2-25-0

8. INSECT RESISTANCE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[1]	THRIPS	[0]	BURROWING BUG
[0]	LEAF HOPPER	[1]	NEMATODE (*Specify species*)
[0]	SOUTHERN CORN ROOTWORM	[0]	LESSER CORNSTALK BORER
[0]	APHID	[ ]	OTHER (*Specify*) _____

9. COMPARISON OF SUBMITTED VARIETY WITH ONE OR MORE SIMILAR VARIETIES:

VARIETY	OIL* (%)	PROTEIN* (%)	OLEIC: * LINOLEIC ACID RATIO	IODINE* NUMBER	SHELLING (%)	SMK** (%)	ELK+. (%)	MAIN STEM HEIGHT (CM)
SUBMITTED	50.4	27.0	3.5	84	78	76	30	36
SIMILAR	51.0	27.0	3.8	83	79	77	39	38
NAME OF SIMILAR VARIETY	C-99R	C-99R	Fla. MDR 98	Fla. MDR 98	Southern Runner	Southern Runner	C-99R	SunOleic 97R

* *From Sound Mature Kernels* ** Sound Mature Kernels + Extra Large Kernels

10. INDICATE A VARIETY WHICH MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	VARIETY	CHARACTER	VARIETY
POD COLOR	Fla. MDR 98	SEEDLING VIGOR	C-99R
SEED DORMANCY	Fla. MDR 98	HULL THICKNESS	SunOleic 95R
SEED SIZE	SunOleic 95R	LEAF COLOR	C-99R

11. COMMENTS (Additional description or clarification — Such as: Relative disease reactions may be compared with standard varieties)

8

16d. Exhibit D - Additional Description of Variety

DP-1 is a late maturity (150+ DAP) runner market-type peanut with excellent pod/seed yield potential, excellent resistance to TSWV, white mold, and late leafspot. Seed of DP-1 has "normal" oil chemistry but usually has an O/L of over 3.0.

Table 1 gives data on pod yields, grades, and disease ratings (TSWV, leafspot) in Florida tests conducted at Marianna and Gainesville (1996-2001). The data show that DP-1 has pod yields very similar to C-99R under sprayed and unsprayed conditions. DP-1 shows a pod yield advantage over Florida MDR 98 in sprayed and unsprayed tests.

Table 2 gives data from Marianna tests on leafspot resistance, comparing DP-1 to C-99R and Florida MDR 98. Main-plot treatments were either unsprayed or sprayed with four fungicide applications on a 21-day schedule, beginning 55 DAP. Pod yields and disease ratings indicate that DP-1 has good resistance to leafspot, even better than C-99R and Florida MDR 98. Pod yields are higher and disease lower for DP-1.

Table 3 give data on TSWV tests grown at Marianna and Tifton, under heavy disease pressure conditions (early April planting, four seed/row foot). DP-1 shows a clear advantage over the resistant check (Georgia Green) for pod yields and TSWV resistance in all tests.

Table 4 gives data on field white mold paired-row tests, with two rows inoculated with *S. rolfsii* and two rows not, to evaluate resistance. Results on pod yields and disease ratings indicate that DP-1 has excellent resistance to *S. rolfsii*. Pod yields and disease ratings are even better than for C-99R and considerably better than for Georgia Green.

Table 5 gives data on oil chemistry from Florida tests analyzed in University of Florida labs (1999-2000). These results indicate that DP-1 has "normal" oil chemistry but a higher O/L than for C-99R, Georgia Green, or Florunner. The oil content of DP-1 seed is around 50%, being somewhat less than C-99R and Georgia Green.

Table 6 gives additional data on seed chemistry from 2001 crop, analyzed at a commercial lab. These results further indicate the "normal" oil chemistry of DP-1, with a higher O/L than for C-99R and Georgia Green. These sample values indicate a somewhat lower oil content but a similar relationship to C-99R and Georgia Green. Flavor ratings were between C-99R and Georgia Green and acceptable.

Table 7 gives blanching data for samples of DP-1 from Marianna (1999-2000). Values for whole blanch and not were essentially the same for Georgia Green and C-99R. DP-1 had more partial blanched seed than the other two varieties, but should be acceptable.

Table 8 gives data for seed size distribution on DP-1 for Marianna samples (1999-2000). For 2000 data DP-1 has more larger seed than Georgia Green. In 1999 data DP-1 had fewer large seed than Hull. Considered with grading data, DP-1 is not as large in seed size as C-99R and Florida MDR 98 but larger than Georgia Green.

Table 1. Pod yield and grading data for DP-1 in Florida tests (1996-2001).

Entry	Pod Yield (lbs./A)	% Meat	% TSMK[1]	% ELK[2]	100-seed wt. (g)	Disease A	Disease B[3]
Sprayed (37)[4]							
DP-1	4645	78.4	75.9	28.9	61.9	2.4	3.5
C99-R	4725	79.1	78.2	40.6	73.3	2.9	3.3
Sprayed (13)							
DP-1	4744	77.8	75.5	29.0	60.2	2.3	3.6
Florida MDR 98	4310	80.1	78.8	42.1	68.1	2.9	3.3
Unsprayed (27)							
DP-1	3187	79.8	77.1	25.2	58.2	3.9	3.1
C99-R	3057	80.5	78.8	33.3	69.7	5.4	2.5
Unsprayed (18)							
DP-1	3251	78.9	78.2	21.5	58.2	3.9	3.1
Florida MDR 98	2812	79.9	78.8	33.4	67.2	4.6	2.7

[1]TSMK = sound mature kernels, seed riding a 16/64th inch slotted screen.
[2]ELK = extra large kernels, seed riding a 21.5/64th inch slotted screen.
[3]Disease rated on A) 1-10 scale, with 1 = no disease symptoms, and B) 4-1 scale, with 4 = highly resistant (sprayed tests rated for tomato spotted wilt virus, unsprayed rated for leafspot).
[4]Number in parentheses = number of tests.

Table 2. Leafspot resistant yield tests on DP-1 at Marianna and Gainesville, FL (1999-2001).

			Disease rating[2]			
	Pod yield (#/A)		Sprayed		Not	
Year/Entry	Sprayed	Not[1]	A	B	A	B
1999 - Marianna						
DP-1	4719	3983	2.8	3.4	3.3	3.2
Fla. MDR 98	4020	3233	4.2	2.9	3.7	3.1
C-99R	4066	3279	4.2	2.9	5.7	2.4
1999 - Gainesville						
DP-1	4175	2589	1.8	3.8	4.0	3.0
Fla. MDR 98	3751	2105	2.0	3.7	4.5	2.9
C-99R	4525	2698	2.8	3.4	4.8	2.8
2000- Marianna						
DP-1	5382	3857	2.2	3.7	3.5	3.2
Fla. MDR 98	4644	3505	2.8	3.4	4.5	2.7
C-99R	5267	3792	2.8	3.4	4.8	2.8
2000 – Gainesville						
DP-1	4344	2299	2.8	3.4	4.0	3.0
Fla. MDR 98	2822	3727	3.4	3.2	4.2	2.9
C-99R	4417	3618	3.0	3.4	4.5	2.9
2001 – Marianna						
DP-1	4776	3462	2.2	3.7	3.5	3.2
Fla. MDR 98	3605	2709	3.0	3.4	3.8	3.1
C-99R	4396	3288	2.5	3.5	4.7	2.8
2001 - Gainesville						
DP-1	3317	2142	2.5	3.5	4.0	3.0
Fla. MDR 98	2741	1940	4.0	3.0	4.5	2.9
C-99R	3618	2710	3.8	3.1	4.9	2.8

[1]Fungicide/spray treatment 1) sprayed four times with fungicide for leafspot and 2) unsprayed.

[2]Disease severity rated on A) 1-10 scale, 1 = no disease or B) 4-1, with 4 = highly resistant.

Table 3. Tomato spotted wilt studies in Florida and Georgia (1998-2000)[1].

	% Disease			Pod Yield (kg/ha)		
Entry/Year	GA	FL	Mean	GA	FL	Mean
1998						
DP-1	21.7	25.8	23.8	6103	4619	5361
Georgia Green	50.8	65.0	57.9	4570	3699	4135
Georgia Runner	81.7	89.6	85.6	2943	2645	2794
1999						
DP-1			25.9	4576	3790	4183
Georgia Green			50.4	3363	2414	2888
GK 7			82.7	2081	814	1448
2000						
DP-1	17.1	10.8	14.0	5130	4430	4780
Georgia Green	54.6	29.0	41.8	2706	2936	2821
GK 7	62.1	40.0	51.1	2473	1971	2222

[1]Data from Dr. Albert Culbreath, University of Georgia, Tifton.

Table 4. Data on paired-row tests inoculated with *S. rolfsii* to evaluate white mold resistance, 1999-2001.

	Yield (kg/ha)		Disease[1]			
Entry	Inoc.	Not	Inoc.		Not	
			A	B	A	B
Florunner	2175	3102	7.1	1.9	5.8	2.4
Georgia Green	3780	4651	4.3	2.9	3.2	3.2
C-99R	4311	4675	3.0	3.4	2.5	3.5
DP-1	4777	5352	2.6	3.5	1.8	3.8

[1]Disease rated A) 1-10 (1 = no disease); B) 4-1 scale, with 4 = highly resistant..

Table 5. Oil chemistry data from Florida samples analyzed in University of Florida labs (1999-2000)[1].

Entry	Oleic (18:1)	Linoleic (18:2)	Oil
	---------- % ----------		
DP-1	61.7	17.7	50.7
C-99R	58.8	20.5	52.0
Georgia Green	54.8	25.1	51.3
Florunner	56.0	24.1	49.7
SunOleic 97R	80.7	2.5	49.0

[1]Data based on no less than 10 fatty acid samples and four samples for oil.

Table 6. Chemical and flavor data for DP-1 (2001).

	Fatty Acids (%)			%	%	
Entry	16:0	18:1	18:2	Oil	Sugar	Flavor[1]
DP-1	8.8	57.5	20.9	46.5	3.6	4.4
C-99R	9.2	53.2	24.8	48.0	3.3	5.0
Georgia Green	9.7	51.4	28.1	49.3	3.2	4.0

[1]Flavor rated on 1-10 (10 = strongest).

Table 7. Blanching data on DP-1 from Florida samples (1999-2000)[1].

Entry	Splits	Whole	Not	Partial
	---------- % ----------			
DP-1	3.2	81.0	2.7	10.5
Georgia Green	10.2	82.3	3.7	4.0
C-99R	6.2	84.5	2.3	4.3

[1]Data from Mr. Walt Mozingo, VPI, Suffolk, VA.

Table 8. Seed size distribution data on DP-1 from Florida samples (1999-2000).

Entry/Year	Percent riding screen size (64th inch) 21	18	16	14	SS[1]	OK[2]	Meat
2000	---------- % ----------						
DP-1	39.1	29.0	2.8	1.0	3.5	1.4	76.8
Georgia Green	35.1	34.4	3.7	0.8	2.7	0.5	77.2
1999							
DP-1	19.7	33.5	11.4	3.5	4.2	4.4	76.7
Hull	30.7	28.0	6.5	2.1	7.3	2.4	76.4

[1]SS = sound splits.
[2]OK = other kernels (pass thru 14/64).

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

RAD 4/18/05

1. NAME OF APPLICANT(S)
Florida Agricultural Experiment Station
~~University of Florida/IFAS~~

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER
UF97318

3. VARIETY NAME
DP-1

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
Office of Dean for Research
1022 McCarty Hall, University of Florida
P. O. Box 110200
Gainesville, FL 32611-0200

5. TELEPHONE *(include area code)*
352-392-1784

6. FAX *(include area code)*
352-392-4965

7. PVPO NUMBER
20030206

8. Does the applicant own all rights to the variety? *Mark an "X" in appropriate block.* If no, please explain. [X] YES [ ] NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company? [X] YES [ ] NO
If no, give name of country _____

10. Is the applicant the original breeder? If no, please answer the following: [X] YES [ ] NO

a. If original rights to variety were owned by individual(s):
Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country _____

[X] YES [ ] NO

b. If original rights to variety were owned by a company:
Is the original breeder(s) U.S. based company? If no, give name of country _____

11. Additional explantion on ownership *(If needed, use reverse for extra space):*
D. W. Gorbet (Professor) - peanut breeder for Florida Agricultural Experiment Station

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.

2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.

3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

16.e. Ownership Statement

DP-1 originates from a 1986 cross made in the greenhouse at Marianna by D. W. Gorbet. All selections were made in the field at Marianna by D. W. Gorbet under unsprayed conditions. Seed from F_7 plants were bulked to initiate field yield trials at Marianna in 1994. Yield tests were continued at Marianna and Gainesville in 1997-2001, with both sprayed and unsprayed tests. UF97318 was approved for release by the Florida Agricultural Experiment Station (FAES) in 2002 as a new multiple disease resistant late maturity cultivar named DP-1.

Florida Foundation Seed Producers, Inc. (FFSP) has been designated and authorized to produce breeder and foundation seed of DP-1 for commercial distribution. Only companies with approved contracts with FFSP are authorized to produce and sell seed of DP-1.

DP-1 was developed by FAES scientist (breeder). By agreement between the breeder and FAES, this invention belongs to FAES and all rights, access, and use of this invention shall be in accordance to FAES policy.